

Global Commodity Chains: New Forms of Coordination and Control Among Nations and Firms in International Industries

Gary Gereffi

Department of Sociology, Duke University, Durham, NC 27708-0088, USA

This article builds on Whitley's comparison of the business systems and global commodity chains approaches to the study of economic organization within and across nations and regions. My objective is to provide a fuller exposition of the logic and evidence underlying the emergence, evolution, and variation in buyer-driven and producer-driven commodity chains. While there are clearly national differences within commodity chains, the idea that nations matter more than industrial sectors in generating contrasting forms of economic organization in global capitalism remains debatable. One of the central propositions of the commodity chains perspective is that globalization tends to diminish the influence of national origins on business systems. The way firms do business in the international economy thus is determined to an increasing extent by their position in global commodity chains, not their national origins. Nonetheless, because they highlight different units and levels of analysis, the business systems and commodity chains approaches are best viewed as complementary (rather than competing) theoretical frameworks.

Business Systems, Industrial Districts, and Global Commodity Chains Compared

The business systems and global commodity chains (GCC) approaches offer different ways of understanding the organizational dynamics of global capitalism. As defined by Whitley (1996: p. 412)

Business systems are particular forms of economic organisation that have become established and reproduced in certain institutional contexts – local, regional, national or international. They are distinctive ways of coordinating and controlling economic activities which developed interdependently with key institutions which constitute particular kinds of political, financial, labour and cultural systems. The more integrated and mutually reinforcing are such institutional systems over a particular territory or population, the more cohesive and distinctive will be its business system (also see Whitley, 1992a; 1992b; 1994).

The main distinguishing features of the business systems approach, therefore, are: (a) distinct *institutional contexts*; (b) a predominant emphasis on *national* business systems (which tend to have the kind of integrated and mutually reinforcing institutional arrangements that lead to cohesive business systems); and (c) even in the rare cases of supranational regions that have sufficient ethnic homogeneity, historical continuity, and isolation from external influences to constitute a distinctive business system (such as East Asia, but not Europe), a presumption of *geographic proximity*.

The GCC approach offers a different, albeit potentially complementary, set of analytical foci. (a) Although GCCs are very definitely influenced by their international, national, and local institutional settings, the main emphasis is on the *organizational features* of the chains, with particular attention given to the role played by multiple kinds of economic networks. (b) Commodity chains by their very nature involve *cross-national* forms of economic organization, although the geographic scope of these chains remains a variable (e.g., certain commodity chains seem to be regionalized, rather than global, in their configuration). (c) The governance structures of GCCs typically coordinate and control economic activities that are *geographically dispersed*. (d) An additional feature of GCCs that is not present in the business systems approach is the concern with *inter- and intrasectoral variations*, both in terms of the finished products that give different chains their name (e.g., the footwear, automobile, or computer commodity chains), as well as the distinct economic segments that make up a particular chain (e.g., synthetic or natural fibers, textiles, garment manufacturing, and retailing for the apparel commodity chain).

The industrial districts literature, which was based on the flexible specialization model initially derived from the Italian experience, shares some features of both the business systems and commodity chains approaches (see Piore and Sabel, 1982; Pyke *et al.*, 1990; Pyke and Sengenberger, 1992; and Humphrey, 1995). As in the business systems perspective, there is a general concern with the institutional and regulatory frameworks that undergird spatially clustered industrial districts. The spirit of "cooperative competition" that pervades industrial districts is thought to be rooted in a common cultural and social background linking the economic agents within the cluster, who are supported by a variety of public and private local institutions. The similarities with the commodity chains approach include: the emphasis on interfirm networks in these districts, in which small and medium-sized firms tend to predominate; a high level of sectoral specialization in many districts; and an emphasis on backward and forward linkages, based on market as well as nonmarket exchanges of goods, information, and people.

The differences between the commodity chains and industrial districts approaches are perhaps even more revealing. (a) While the industrial district model tends to focus on linkages internal to the cluster, the GCC framework stresses *external linkages* that connect local producers to national, regional, and global markets. (b) Producer-driven and buyer-driven commodity chains highlight *inter- and intrasectoral variation*, whereas there are no hypotheses about how industrial districts that make different kinds of products should vary. (c) The GCC framework emphasizes the *dynamic factors* that lead to changes in the position of countries and firms in global production and trade networks, while the industrial districts model is more static because of its concern with what holds these districts together.¹ (d) The analysis of GCCs shows that *the impact of globalization is uneven* across countries and regions, while the industrial districts approach is quite localized. There is no overarching framework that shows how these districts might vary across space.

¹ Not all of the industrial districts literature has a static orientation. Storper and Walker (1989) argue that industrial districts are made, not born, via a combination of chance and purposeful actions that contributes to their growth. Industrial districts have their own life cycle, with self-limiting synergies and phases of both growth and decline.

Given this preliminary backdrop, I will try to address some of the questions raised in Whitley's article about: the factors leading to the emergence, stabilization, and change of commodity chains; problems concerning units and levels of analysis; and how commodity chains are affected by the kinds of institutional variation highlighted by the business systems literature.

The Emergence of Buyer-Driven Commodity Chains

One of the central contentions of the GCC approach is that the internationalization of production is becoming increasingly integrated in globalized coordination systems that can be characterized as producer-driven and buyer-driven commodity chains (Gereffi and Korzeniewicz, 1994). While the evolution of producer-driven chains coincides with the growth of transnational corporations and thus raises many familiar issues for organizational and development theorists alike, the emergence of buyer-driven chains in labor-intensive, consumer goods industries is much more recent, occurring primarily in the past three decades.

Several sets of factors help to explain the emergence of buyer-driven commodity chains since the 1960s. On the supply side, there has been a marked increase in the industrial capability of Third World nations. Particularly in East Asia, the prevalence of export-oriented development strategies gave rise to a multitude of export manufacturers, especially for labor-intensive consumer goods. The evolution of Asian manufacturing capability spread rapidly from Japan in the late 1950s and 1960s, to the East Asian newly industrializing economies – South Korea, Taiwan, Hong Kong, and Singapore – during the late 1960s and 1970s, and then to Southeast Asia and the People's Republic of China in the 1980s, and currently to a wide range of lesser-developed countries including Bangladesh, Pakistan, Sri Lanka, and Vietnam in the 1990s (see Gereffi, 1995; 1996). The sourcing networks for buyer-driven commodity chains extend to virtually all world regions, although the export volumes and variety of consumer goods are greatest in Asia.

This intensification of export competition among Third World nations, while stimulated to a considerable degree by the activities of firms (e.g., Japanese trading companies, U.S. and European transnational manufacturers and retailers, and local exporters), also was profoundly shaped by political processes and regulatory institutions at international and national levels. These include the open international trade regime promoted by the General Agreement on Tariffs and Trade, the sector-specific patterns of protectionism in industries like apparel (the Multifibre Arrangement) and autos (Voluntary Export Restraints imposed by the United States on Japan), and the promotion by the United States and the World Bank of export-oriented industrialization as a new development orthodoxy for Third World nations in the 1980s and 1990s.

On the demand side, there has been a substantial consolidation of power in the hands of retailers and designers in the developed countries. Between 1991 and 2000, for example, the ten biggest public retailers in the United States are expected to increase their share of the U.S. retail market from 34 percent to nearly 60 percent (KSA, 1992). Although the degree of market power that is concentrated in U.S. big buyers may be

extreme, owing to the recent spate of mergers and acquisitions in the U.S. retail sector, a similar shift in power from manufacturers to distributors and retailers appears to be underway in most developed economies. Retailing across the European Union has been marked by a process of substantial concentration in recent years. In both France and Italy, the role of independent retailers in the clothing market has declined since 1985, while the share of specialty chains, franchise networks, and hypermarkets is rising rapidly. In Germany, the five largest clothing retailers (C&A, Quelle, Metro/Kaufhof, Kardstadt, and Otto) account for 28 percent of the EU's largest national market, while the United Kingdom's two top clothing retailers (Marks & Spencer and the Burton Group) control 25 percent of the UK market (OETH, 1995: 11–13). In Japan, the 1992 revision of the Large Retail Store Law, which liberalized restriction on the opening of new retail outlets, has caused a rapid increase in the number of large-volume retailers and suburban chain stores. The Japanese government predicts there will be 20 percent fewer retailers in Japan in the year 2000 than in 1985, mainly because of attrition among the small and medium retail stores (Japan Textile News, 1996).

The growth of big buyers has led to a shift in power from the production to the consumption side of commodity chains, and it has given retailers and designers unprecedented scope to reshape international supply networks (Gereffi, 1994). New information technologies are to a large degree responsible for this shift, since they provide retailers and distributors with real-time information about what customers want to buy (U.S. Office of Technology Assessment, 1987; Hoffman and Rush, 1988). Peter Drucker (1992), citing examples from apparel, hardware, supermarkets, and even autos, elaborates on this point:

Distribution is increasingly becoming concentrated; manufacturing, by contrast, is increasingly splintering. [A]s long as we did not have market information, decisions (especially day-to-day operating decisions) had to be made as *manufacturing* decisions. They had to be controlled by what goes on in the plant, and they had to be based on the only information we had (or believed we had) on manufacturing costs. Now that we have real-time information on what goes on in the marketplace, decisions will increasingly be based on what goes on where the ultimate customers, whether housewives or hospitals, take *buying* action. These decisions will be controlled by the people who have the information – retailers and distributors. Increasingly decision-making power will shift to them [emphasis in the original].

These changes have allowed big retailers to push inventories back on manufacturers, and to be the primary beneficiaries of Quick Response networks that link retailers, manufacturers, and their component suppliers.

Finally, buyer-driven commodity chains reflect an increasing specialization of companies, which are now emphasizing a focus on “core competencies” and “strategic capabilities” as a key to achieving maximum flexibility, reduced risk, and higher profits (Prahalad and Hamel, 1990). One of the most notable features of buyer-driven chains is the creation since the mid-1970s of prominent design firms whose brands are extremely well known, but that carry out no production whatsoever. These “manufacturers without factories” include companies like Liz Claiborne, Nike, and Reebok, who literally were “born global” since their sourcing has always been done overseas. In the 1980s, many retailers began to compete directly with these national brands by expanding their sourcing of “private label” (or store-brand) merchandise, which is sold more cheaply than the national brands but also is more profitable to the retailers since they cut out one of the main middlemen in the chain.

These factors are not meant to be exhaustive, nor do they do justice to the complex variations contained in buyer-driven chains. What they do show, however, is that the kinds of circumstances that gave rise to decentralized, buyer-driven commodity chains are of recent origin and they apply to a range of similar (labor-intensive, consumer-goods) sectors – i.e., they are both novel and distinctive. Whitley (1996) raises a set of more profound concerns, however, with regard to the kinds of mechanisms that explain sectoral variations in commodity chains; the role of national institutions in encouraging, inhibiting, and differentiating GCCs; the question of how GCCs are reproduced; the problem of appropriate units and levels of analysis in studying business systems and commodity chains; and the changing field boundaries of economic globalization. We now turn to some of these issues.

National Variation Within GCCs

One of the most interesting propositions raised by Whitley's article is that "... forms of economic organization vary significantly more at the national level than sectorally" (1996: p. 415). There clearly is a variety of evidence to support the idea that there are national variations *within* GCCs. However, the proposition that nations matter more than sectors remains debatable. The relative importance of nations vs. sectors probably is less significant, in any event, than an understanding of what causes the variation at each level of analysis. Furthermore, if economic organization does vary across both national and sectoral divides, then the proposition that business systems and GCCs are complementary (rather than competing) forms of economic organization is strengthened.

What are the causes of national differences within GCCs? One major source of variation is national industrial structures. East Asia's four tigers, for example, have quite different industrial structures despite the fact that they have followed similar export-oriented development strategies. Hong Kong and Taiwan are both small-firm economies, while South Korea and Singapore are big-firm economies. The differences don't stop there. Hong Kong's small firms operate in a *laissez-faire* *entrepôt* economy, while Taiwan's small firms are more tightly integrated with upstream producers; South Korea's big firms are vertically integrated domestic conglomerates (*chaebol*), while Singapore relies heavily on transnational corporations (Cheng and Gereffi, 1994). Similar contrasts are apparent in terms of the relative prominence of transnationals, locally owned firms, and state enterprises among the ten largest companies in South Korea, Taiwan, Mexico, and Brazil (Gereffi, 1990).

These differences in industrial structure have implications for how countries are inserted into GCCs. For example, Korean and Taiwanese companies have pursued contrasting paths in both the footwear and computer industries. Korean *chaebol* have followed mass production strategies that allowed them to dominate world markets in specific footwear and computer niches when demand was stable and high. However, the smaller Taiwanese producers are much more flexible than their Korean counterparts. They produce a wider variety of footwear (e.g., vinyl and rubber shoes, as well as athletic footwear), and they have been more likely to move beyond original equipment manufacturing (OEM) to the own-brand manufacturing (OBM) export role (Gereffi and Korzeniewicz, 1990; Gereffi, 1995). Similarly, Levy and Kuo (1991) show that while Korean firms have pursued an assembly strategy in promoting the development of the

keyboard and personal computer assembly industries, the much smaller Taiwanese firms have been equally, if not more, successful in following a bootstrap strategy where small firm size at entry is followed by rapid rates of expansion and considerable product innovation.

Because there are differences in the degree of retail concentration among industrialized nations, the relative weight of retailers and designers as "drivers" in consumer-goods supply chains varies.² The United States has the largest and most powerful retailers, and the various types of retailers (e.g., discount chains, department stores, specialty shops) and designers follow distinct patterns in terms of how and where they source their goods (Gereffi, 1994). Historically, the United Kingdom and the Netherlands have had large retail organizations as well. Whereas in the Netherlands retailers were quick to switch to direct imports (as happened in the United States), the major UK retailers (led by Marks & Spencer, whose mission statement was to source in Britain) exerted tight control over their domestic suppliers and obliged them to produce exclusively in the United Kingdom. When the UK retailers did loosen their buying policies in the 1980s, UK manufacturers were unable to adjust. In Belgium and France, the largely independent retailers were in a weak bargaining position relative to the manufacturers, who had their own brands and eventually started their own retail operations. Germany has a tradition of regionally based retailers; the manufacturers used to be dominant because production was more centralized than retailing. Now in Germany both retailers and manufacturers are engaged in extensive offshore sourcing. At the opposite end of the spectrum, Italy and Japan have notoriously fragmented retail institutions, and strong craft and quality orientations within their manufacturing sectors. This has led manufacturers to retain a strong bargaining position vis-à-vis retailers and distributors. However, recent evidence suggests that Japan is undergoing a "distribution revolution" in which the focus is shifting from upstream manufacturers to downstream retailers (the sector in the best position to gain information and knowledge of consumer needs), with a drastic reduction in the number of wholesalers (Japan Textile News, 1996). In both Japan and Italy, small manufacturers and retailers alike are being squeezed out by mergers and acquisitions among larger companies (Harrison, 1994).

Does the fact that the relative strength of retailers and manufacturers varies between the United States, the European Union, and Japan undermine the utility of the distinction between producer-driven and buyer-driven commodity chains? I don't think so. First of all, the commodity chains framework is rooted in sectoral analysis, and the primary factors that determine the "drivers" of the chains are located there. This does not mean that entire sectors are homogeneous in terms of a single type of firm being dominant. Here I accept the business systems argument that a wide range of institutional factors can shape how economic activities in particular sectors are organized across national boundaries. However, the process of globalization has established new trends and capabilities for economic coordination and control that are likely to erode at least some of these national differences. In the end, the most stable institutional patterns may actually form at the level of supranational regions that have close geographic and social proximity.

² These characterizations of the retail sector in Europe and Japan are based on Scheffer (1994) and author interviews.

Perhaps the most distinctive contribution of the GCC perspective vis-à-vis the business systems approach is its ability to address the question: How do different Asian, U.S., and European business systems respond to globalization? Our general working hypothesis is that globalization (defined as the participation of firms in overseas markets via mechanisms such as exports, direct foreign investment, sourcing, and strategic alliances) tends to diminish the influence of national origins on business systems, and to highlight the role of design, production, and marketing core competencies and strategic capabilities within and between economic sectors. The way firms do business in the global economy thus is determined to an increasing extent by their position in GCCs, not their national origins. *Ceteris paribus*, if we find strategic or structural *convergence* between firms of different nationalities, or *divergence* between firms of the same nationality, we would interpret this as evidence that the hold of national business systems is weak or declining.

Discussion of the evidence relating to this proposition is beyond the scope of this paper, and indeed constitutes one of the main items on the GCC research agenda. Two brief illustrations from the electronics sector will have to suffice. There are opposing images of U.S. and Japanese production networks in East Asia's electronics commodity chain. U.S. networks are considered to be relatively open and conducive to local development in host countries, while Japanese networks are perceived as closed and hierarchical with activities confined within affiliates that are tightly controlled by the parent company. This contrast between the "open" networks of U.S. electronics firms and the "closed" networks of Japanese ones may be breaking down, however, as leading Japanese companies like Hitachi and NEC are taking the initiative in establishing more extensive local procurement networks in East Asia, with NEC's Hong Kong subsidiary in charge of redesigning the motherboard so it can use more of the cheaper, standard components available from Korean, Taiwanese, and perhaps even Chinese suppliers (see Gereffi, 1996: 102–106). This trend suggests a partial convergence in the production strategies of Japanese and U.S. transnationals.

In the hard disk drive sector, divergence among firms of the same nationality is evident. The two leading U.S. hard disk drive manufacturers – Seagate and Quantum – are following different strategies. Although both companies have concentrated their production of hard disk drives in Singapore and Malaysia, Seagate is vertically integrated, while Quantum relies on a more decentralized network, with much of its manufacturing carried out by a Japanese supplier, MKE. One of the main reasons for these distinct strategic orientations is that Seagate produces high-end disk drives and wants to protect its proprietary technology, while Quantum is a volume producer that aims at the low end of the market. Global competitive dynamics, not national origins, determine these differences in structure and strategy.

How Far Can We Go with Industrial Sectors?

Sectoral analysis is a useful point of departure for studies of global capitalism. Rather than taking the nation-state as the basic unit of analysis in order to identify how domestic institutions shape the interplay between markets, policies, and national development outcomes, the premise of sectoral analysis is that fundamental differences exist between

industries in terms of technology, competitive structures, and labor-intensity, and these play a primary role in explaining industrial governance structures and the strategies countries should pursue in order to succeed in global markets. Sectoral studies cover a diverse range of topics, including Third World host country bargaining with transnational corporations in international oligopolies (Gereffi, 1983; Grieco, 1984; Newfarmer, 1985; Evans, 1995), how the structural dynamics of global industries affects national competitiveness (Porter, 1990), the role of technology systems in shaping governance structures and national innovation strategies in different industrial sectors (Kitschelt, 1991), the impact of leading export sectors in determining the outcome of national restructuring projects (Shafer, 1994), and the local social and political consequences (e.g., for workers and women) of the globalization of particular industries (Bonacich *et al.*, 1994).

Whereas the classic studies of industrial organization utilized the structure-conduct-performance paradigm to look at economic and regulatory issues within domestic economies (Bain, 1968; Scherer, 1980), the challenge for sectoral studies today is to come to grips with the governance structures that underlie the organization of global industries. Globalization has eroded the traditional boundaries between nations, firms, and industries. Thus both the spatial and economic scope of our analysis needs to be enlarged. The GCC perspective argues that the global organization of production links manufacturers, input suppliers, traders, bankers, designers, and retailers in complex economic networks where the locus of profits and control is constantly shifting (Gereffi and Korzeniewicz, 1994).

Who has the greatest power in GCCs, and what determines the shifting locus of profits and control? An international industrial organization model locates market power with the leading firms in industry segments where the barriers to entry for new competition are greatest and concentration levels are relatively high. This is the basic rationale for the distinction between producer-driven and buyer-driven commodity chains. Whereas producer-driven chains refer to capital- and technology-intensive industries like automobiles, aircraft, or computers where transnational corporations or other large integrated industrial enterprises play the leading role, the main barriers to entry in labor-intensive, buyer-driven chains like apparel, footwear, or toys are at the design and marketing stages, which gives primary power to large retailers and branded marketers.

While the distinction between producer-driven and buyer-driven chains may be a useful first cut in identifying the governance structures of global industries, I agree with Whitley (1996) that analytically we need to go further.³ There are at least four additional sources of variation that we must address: (1) national variations in institutional context; (2) differences in the behavior of leading firms within sectors; (3) the role of standardized versus differentiated segments within GCCs; and (4) changes over time in the locus of power and economic surplus in an industry.

I have already provided a number of examples in the preceding section of how

³ In Table 1 of his article, Whitley notes that "mechanisms explaining variations in commodity chains, their establishment, stabilisation and change" are major lacunae in the global commodity chains framework. While some of these mechanisms, like triangle manufacturing (Gereffi, 1994), the transition from OEM to OBM export roles (Gereffi, 1995), and the formation and operation of overseas buying offices by U.S. retailers (Gereffi and Pan, 1994), have already been discussed elsewhere, this remains a major task for future analysis.

countries vary in the ways they are linked to GCCs. These sources of variation can include: domestic industrial structure, development strategy, export roles, regulatory framework, etc. This is the sphere of the business systems paradigm. What I would argue, nonetheless, is that there is a global industrial structure to which all countries need to adapt in order to be successful. There is considerable scope for national variations, but this scope is not unlimited. Taiwan and South Korea may have successfully pursued different styles of exporting in buyer-driven commodity chains, but only a few countries in the world have attained their level of success. Therefore, we still need to be attentive to the direction of master trends (e.g., the increased export capability of Third World nations, and the corresponding increase in offshore sourcing by retailers and manufacturers in developed countries), as well as to the likelihood that some institutional patterns will have a better adaptive "fit" to these trends than others.

There is significant variation in the behavior of leading firms in all GCCs. While "short term changes in firms' strategies or organisational structures" and "individual firm behavior" are not dealt with by the business systems framework (Whitley, 1996), this is a dimension that GCC analysis can not afford to ignore. In particular industries, individual firms have been identified with general patterns of economic organization (e.g., Ford and Toyota in the automobile industry); they also can highlight key contrasts in how domestic, regional, or global sourcing and production networks are set up and operate. Marks & Spencer in the UK and Wal-Mart in the United States are both associated with strong preferences for domestic sourcing (although in both cases, their rhetoric seems to be more powerful than the reality), while their main competitors are far more global; in the apparel sector, The Gap is identified with long-term sourcing partnerships, while The Limited (and Mast Industries, its wholly owned sourcing agent) are identified with speed sourcing and arm's-length relationships with overseas contractors; in footwear, Nike and Bata Shoes have diametrically opposed approaches to the relationship between marketing and manufacturing; etc. Here again, we are faced with the fact that variations in firm-level governance structures exist within GCCs. These alternate paths are relatively few in number, but they must be explained and incorporated into the analysis because they represent choice points or options that firms or countries may pursue.

Due to the workings of the product life cycle, one finds a contrast in virtually every industry between standardized and differentiated industrial segments. This is extremely important for GCC analysis because the distinction between standardized and innovative (or fashion-oriented) products is correlated with production technologies, the existence of domestic vs. global sourcing networks, and the degree to which firms are innovation- or customer-driven. Since this is a complicated topic, a few examples will have to suffice to indicate the processes at work here. The U.S. apparel sector has a standardized segment (e.g., cotton underwear, blue jeans, men's dress shirts, jogging suits) made up of products that are sold throughout the year, and a fashion segment (e.g., women's wear) which is sold in shorter buying seasons of 6–8 weeks in length. Standardized apparel is made by large, vertically integrated manufacturers (e.g., Levi-Strauss, VF Corporation, Fruit of the Loom, Sara Lee), much of it produced in U.S. factories or sent to Mexico and the Caribbean for assembly from U.S. made and cut parts into finished garments. Fashion apparel is primarily imported from Asia by large retailers (e.g., Kmart, JC Penney, The Limited) or branded marketers (e.g., Liz Claiborne, Polo/Ralph Lauren). In apparel, the standardized vs. fashion segments are highly correlated with where production takes place (the United States or the Caribbean Basin for standardized goods,

Asia for fashion goods), how production takes place (large, assembly-oriented factories for standardized goods vs. networked, OEM production for fashion goods), and the kinds of firms that are the “drivers” of these segments (large U.S. manufacturers for standardized items vs. U.S. retailers and designers for the fashion segment).

More generally, this distinction between standardized and differentiated segments holds for producer-driven as well as buyer-driven commodity chains. In personal computers, there are manufacturers that stress product innovation (IBM, Compaq, Toshiba), and at the other end of the spectrum, computer companies that basically assemble standardized products using off-the-shelf parts (Dell, Gateway, Packard-Bell). Between these two poles are various OEM computer firms (like AST) that are unbranded manufacturers. Even though the computer commodity chain is primarily producer-driven, some of the companies within this sector are actually customer-oriented. The main assets of Dell or Gateway are their highly efficient assembly and distribution centers, their after-sale product service, and their ability to reach mass markets through mail-order catalogues and discount retail chains. The general point here is that within producer-driven and buyer-driven *sectors*, one can identify a range of manufacturing-oriented and customer-oriented *companies*. This phenomenon needs to be more adequately theorized.

Finally, it is important to emphasize that GCC analysis has to be dynamic. The power exercised by large retailers and designers in buyer-driven commodity chains is relatively recent. Domestic manufacturers were the key actors in most U.S. consumer goods industries before the import surge of the early 1970s. Nike, Reebok, Liz Claiborne, and Wal-Mart didn't exist prior to the mid-1970s. U.S. retailers didn't start emphasizing their own private label sourcing until the 1980s. The most profitable segments of commodity chains can and do change continually over time. These shifts in power and profitability are clearly evident in the apparel commodity chain:

In the 1960s and 1970s – when export-oriented garment manufacturing was expanding in East Asia – U.S. garment companies, East Asian factories, and importers all made a lot of money. As the quotas and other protectionist policies of developed nations proliferated in the 1970s, the overseas factory owners and traders who manipulated these quotas (so-called quota-brokers) garnered substantial windfall profits. In the 1980s market power in the apparel commodity chain began to shift toward integrated textile companies and large retailers, with garment manufacturers caught in the middle. As garment manufacturers were squeezed, they turned up the pressure on their contractors to make clothes with more fashion seasons, faster turnaround times, lower profit margins, greater uncertainty about future orders, and frequently worse conditions for workers. No segment of the apparel commodity chain guarantees high profits; there are bankruptcies and failures at every level (Appelbaum and Gereffi, 1994: 60).

Therefore, we need to use the GCC framework as a flexible analytical tool. Governance structures tend to persist until the conditions that give rise to them are altered, but the power of any one group of actors is not immutable.

Global Commodity Chains as Organizational Fields

What is the appropriate organizational field to use in studying economic globalization? Organization theory initially focused on transnational corporations that straddled both

countries and industries (Westney, 1993). An alternative approach is to posit that a "global industry" constitutes a single organizational field, one "in which a firm's competitive position in one nation significantly affects (and is affected by) its position in other nations. Rivals compete against each other on a truly worldwide basis" (Porter, 1990: 53).

The GCC perspective goes much further than either the transnational corporation or global industry vantage points. In effect, GCCs extend the notion of organizational fields to encompass the strategic networks of economic actors – innovators and designers, input suppliers and finished goods manufacturers, traders and financiers, wholesalers and retailers – that provide particular sets of goods in the global economy. The organization of these networks can be centralized or decentralized, and have a wide or narrow geographical scope. These chains are shaped by a variety of institutional forces, including state policies, national variations in labor systems, domestic industrial structures, and the like. What is essential, however, is that traditional boundaries between nations, firms, and industries are being reconfigured, and organization theory as well as development theory need to find ways of encompassing all the relevant actors within a single framework.

References

- Appelbaum R.P., and Gereffi G. (1994), "Power and Profits in the Apparel Commodity Chain," pp. 42–62 in Bonacich *et al.* (eds.) *Global Production: The Apparel Industry in the Pacific Rim*, Philadelphia, PA: Temple University Press.
- Bain J. (1968), *Industrial Organization*, New York: John Wiley & Sons.
- Bonacich E., Cheng L., Chinchilla N., Hamilton N., and Ong P. (eds.) (1994), *Global Production: The Apparel Industry in the Pacific Rim*, Philadelphia, PA: Temple University Press.
- Cheng L-L., and Gereffi G. (1994), "The Informal Economy in East Asian Development," *International Journal of Urban and Regional Research*, 18(2), 194–219.
- Drucker P. (1992), "The Economy's Power Shift," *Wall Street Journal*, September 24.
- Evans P. (1995), *Embedded Autonomy: States and Industrial Transformation*, Princeton, NJ: Princeton University Press.
- Gereffi G. (1983), *The Pharmaceutical Industry and Dependency in the Third World*, Princeton, NJ: Princeton University Press.
- Gereffi G. (1990), "Big Business and the State," pp. 90–109 in G. Gereffi and D.L. Wyman (eds.) *Manufacturing Miracles: Paths of Industrialization in Latin America and East Asia*, Princeton, NJ: Princeton University Press.
- Gereffi G. (1994), "The Organization of Buyer-Driven Global Commodity Chains: How U.S. Retailers Shape Overseas Production Networks," pp. 95–122 in G. Gereffi and M. Korzeniewicz (eds.) *Commodity Chains and Global Capitalism*, Westport, CT: Praeger.
- Gereffi G. (1995), "Global Production Systems and Third World Development," pp. 100–142 in B. Stallings (ed.) *Global Change, Regional Response: The New International Context of Development*, New York: Cambridge University Press.

- Gereffi G. (1996), "Commodity Chains and Regional Divisions of Labor in East Asia," *Journal of Asian Business*, 12(1), 75–112.
- Gereffi G. and Korzeniewicz M. (1990), "Commodity Chains and Footwear Exports in the Semiperiphery," pp. 45–68 in William G. Martin (ed.) *Semiperipheral States in the World-Economy*, Westport, CT: Greenwood Press.
- Gereffi G. and Korzeniewicz M. (eds.) (1994), *Commodity Chains and Global Capitalism*, Westport, CT: Praeger.
- Gereffi G. and Pan M-L. (1994), "The Globalization of Taiwan's Garment Industry," pp. 126–146 in Bonacich *et al.* (eds.) *Global Production: The Apparel Industry in the Pacific Rim*, Philadelphia, PA: Temple University Press.
- Grieco J. (1984), *Between Dependency and Autonomy: India's Experience with the International Computer Industry*, Berkeley, CA: University of California Press.
- Harrison B. (1994), *Lean and Mean*, New York: Basic Books.
- Hoffman K. and Rush H. (1988), *Micro-Electronics and Clothing: The Impact of Technical Change on a Global Industry*, New York: Praeger.
- Humphrey J. (ed.) (1995), Special issue of *World Development* (Vol. 23, No. 1, January) on "Industrial Organization and Manufacturing Competitiveness in Developing Countries," Oxford: Pergamon.
- Japan Textile News (1996), "Japan's Distribution and Retail Industry," *JTN Quarterly*, 2(2), 14–30.
- Kitschelt H. (1991), "Industrial Governance Structures, Innovation Strategies, and the Case of Japan: Sectoral or Cross-National Comparative Analysis?" *International Organization*, 45, 4(Autumn), 453–493.
- KSA (Kurt Salmon Associates) (1992), "Dancing with Juggernauts," *The KSA Perspective*, January.
- Levy B. and Kuo W-J. (1991), "The Strategic Orientations of Firms and the Performance of Korea and Taiwan in Frontier Industries: Lessons from Comparative Case Studies of Keyboard and Personal Computer Assembly," *World Development*, 19(4), 363–374.
- Newfarmer R. (ed.) (1985), *Profits, Progress and Poverty: Case Studies of International Industries in Latin America*, Notre Dame, IN: University of Notre Dame Press.
- OETH (L'Observatoire Européen du Textile et de l'Habillement) (1995), *The EU Textile and Clothing Industry 1993/94*, Brussels: OETH.
- Piore M.J. and Sabel C.F. (1984), *The Second Industrial Divide: Possibilities for Prosperity*, New York: Basic Books.
- Porter M.E. (1990), *The Competitive Advantage of Nations*, New York: Free Press.
- Prahalad C.K. and Hamel G. (1990), "The Core Competence of the Corporation," *Harvard Business Review*, 90(3), 79–93.
- Pyke F., Becattini G., and Sengenberger W. (eds.) (1990), *Industrial Districts and Inter-firm Cooperation in Italy*, Geneva: International Institute for Labor Studies.
- Pyke F. and Sengenberger W. (eds.) (1992), *Industrial Districts and Local Economic Regeneration*, Geneva: International Institute for Labor Studies.
- Scheffer M. (1994), *The Changing Map of European Textiles: Production and Sourcing Strategies of Textile and Clothing Firms*, Brussels: L'Observatoire Européen du Textile et de l'Habillement.
- Scherer F.M. (1980), *Industrial Market Structure and Economic Performance*, Chicago: Rand McNally.

- Shafer D.M. (1994), *Winners and Losers: How Sectors Shape the Developmental Prospects of States*, Ithaca, NY: Cornell University Press.
- Storper M. and Walker R. (1989), *The Capitalist Imperative: Territory, Technology, and Industrial Growth*, Oxford: Basil Blackwell.
- U.S. Office of Technology Assessment (1987), *The U.S. Textile and Apparel Industry: A Revolution in Progress*, Washington, D.C.: U.S. Congress, Office of Technology Assessment.
- Westney D.E. (1993), "Institutionalization Theory and the Multinational Corporation." pp. 53–76 in S. Ghoshal and D. E. Westney (eds.) *Organization Theory and the Multinational Corporation*, New York: St. Martin's Press.
- Whitley R.D. (1992a), *Business Systems in East Asia: Firms, Markets and Societies*, London: Sage.
- Whitley R.D. (ed.) (1992b), *European Business Systems*, London: Sage.
- Whitley R.D. (1994), "Dominant Forms of Economic Organisation in Market Economies," *Organization Studies*, 15(2), 153–182.
- Whitley R.D. (1996), "Business Systems and Global Commodity Chains: Competing or Complementary Forms of Economic Organization?" *Competition & Change*, 1(4), 415–425.